UNITED STATES PATENT AND TRADEMARK OFFICE

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10/751,252	12/30/2003	Chan Ho Kyung	2101-3-20	3891

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>15 September 2008</u>.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-20 and 27-30</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) <u>1-20 and 27-30</u> is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is a response to communications dated 09/15/08. Claims 1-20

and 27-30 are pending in the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

2. Claims 16-20 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claims 16-20 commonly recite the limitations "the length" and "a length" in lines 5

and 8, respectively. There is insufficient antecedent basis for these limitations in the

claims.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
conditions and requirements of this title.

3. Claims 1-15, 27 and 30 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter. Claims 1-15, 27 and 30 are drawn

to an unpatent-eligible process under § 101 because it is neither tied to a particular

machine or transformed a particular article. See *In re Bilski, 88 USPQ2d 1385 (Fed.*

Cir. 2008).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-20 and 27-30 are rejected under 35 U.S.C. 102(e) as being anticipated by

Cooper et al (PGPUB 2004/0236849) (hereinafter "Cooper").

Regarding **claim 1,** in accordance with Cooper reference entirety, Cooper

discloses a method of communicating a mobile network code (MNC) from a mobile

communications network (Fig. 1) to a mobile station (120), the method comprising:

transmitting a message (*Fig. 3, paragraphs [[0032]-[0038] or Fig. 5, paragraph*

[0053]) comprising *at least one of* a first field (*MCC*) *and* a second field *(IMSI_11_12)*,

wherein the MNC has a first length or a second length such that the first length is

greater than the second length (*2-digits or 3-digits NOC is discussed at paragraph*

[0032]), and wherein the first field (*MCC*) indicates whether the MNC has a length equal

to the first length (2-digit) or the second length (3-digit) (*paragraphs [0031]-[0038], it is*

specifically disclosed at paragraph [0037] that if network operator code (NOC)

(equivalence to MNC [paragraph [0032]]) is a 2-digit, it is carried in the IMSI_11_12 and

if the NOC is a 3-digits, it is carried in the IMSI_11_12 and in the least significant bit of

the MCC as presented by nnA. In the present condition, the claimed the first field

indicates whether the MNC has the length of the first or the second length can

inherently and justly equated to corresponding to the MCC indicating whether the NOC

is a 2 digits or a 3 digits).

Regarding **claim 2**, in addition to features recited in base claim 1 (see rationales

discussed above), Cooper also discloses wherein the first field further indicates whether

the second field is included in the message (Fig. 3) (*paragraph [0037]*).

Regarding **claim 3**, in addition to features recited in base claim 1 (see rationales

discussed above), Cooper also discloses wherein when the network supports the MNC

having the first length, the first field is set to a first logic level (not 0) to indicate that the

second field is included (*paragraph [0037]*).

Regarding **claim 4**, in addition to features recited in base claim 1 (see rationales

discussed above), Cooper also discloses wherein when the network supports the MNC

having the second length, the first field is set to a second logic level (0) to indicate that

the second field is not included in the message (*paragraph [0037]*).

Regarding **claim 5**, in addition to features recited in base claim 1 (see rationales

discussed above), Cooper also discloses, wherein the second field comprises at least a

least significant digit of the MNC (*IMSI_11_12 is discussed paragraph [0037] and*

thereinafter).

Regarding **claim 6**, in addition to features recited in base claim 5 (see rationales discussed above), Cooper also discloses wherein the least significant digit of the MNC of the MNC is IMSI_10 (*Note: This limitation is inherent part of the E.212 disclosed at paragraph [0037] and thereinafter*).

Regarding **claim 7**, in addition to features recited in base claim 6 (see rationales discussed above), Cooper also discloses wherein most significant digits of the MNC are transmitted to the mobile station in a third field (*LSB of MCC*) (*paragraph [0037]*).

Regarding **claims 8-9**, in addition to features recited in base claim 7 (see rationales discussed above), Cooper also discloses comparing the MNC value with the stored MNC value to determine a roaming status [0059].

Regarding **claim 10**, in addition to features recited in base claim 6 (see rationales discussed above), Cooper also discloses wherein the message is sent over at least one of a paging channel and a broadcast control channel (BCCH) (*paragraph [0034]*).

Regarding **claim 11**, in addition to features recited in base claim 10 (see rationales discussed above), Cooper also discloses wherein the message is an extended system parameters message (ESPM) (*Fig. 3*) (paragraph [0034]).

Regarding **claim 12**, in addition to features recited in base claim 10 (see rationales discussed above), Cooper also discloses wherein the message is an ANSI-41 system parameters message (A41SPM) (*claimed message is corresponding to the standard message discussed at paragraph [0005] and thereinafter*).

Regarding **claim 13** in addition to features recited in base claim 10 (see

rationales discussed above), Cooper also discloses wherein the message is a MC-RR

parameters message (MCRRPM) (*claimed message is corresponding to the standard*

message discussed at paragraph [0005] and thereinafter).

Regarding **claim 14** in addition to features recited in base claim 5 (see rationales

discussed above), Cooper also discloses wherein value of the least significant digit of

the MNC is determined based on an association between a decimal value and a binary

value (*paragraphs [0035]-[0037] and thereinafter or Fig. 3*).

Regarding **claim 15** in addition to features recited in base claim 14 (see

rationales discussed above), Cooper also discloses wherein the binary value comprises

4 bits (*paragraphs [0035]-[0037] and thereinafter or Fig. 3*).

Regarding **claim 16**, in accordance with Cooper reference entirety, Cooper

discloses a method of supporting a mobile network code (MNC) having two length types

2-digits or 3-digits NOC is discussed at paragraph [0032]) in a mobile terminal, the

method (*Fig. 6 and paragraphs [0056]-[0060] and thereinafter*) comprising: a mobile

station (MS) receiving a first value representing a mobile network code (MNC) of a first

length from a network (*paragraph [0060], it is disclosed network operator identifier*

(MNC) comprises an MCC value and an NOC value, which may be obtained from the

MCC field and the IMSI_11_12 field. If the NOC is a 2-digit, then it is carried in the

IMSI_11_12); and the MS receiving a second value which identifies whether the length

of the MNC is equal to the first length or the second length which is greater than the first

length, wherein if the second value is equal to a first logic level (*indication in the*

message), the MS identifies that if the network supports the MNC having *the length*

equal to the second length (*paragraph [0060], it is also disclosed, if the NOC is a 3-digit*

value, then it is may be obtained from the MCC filed and the IMSI_11_12 filed,

respectively of the Extended System Parameter Message (ESPM). Thus, it is inherently

there is an indication in the ESPM that the MCC is included in the computation of the

MNC).

Regarding **claim 17** in addition to features recited in base claim 16 (see

rationales discussed above), Cooper also discloses the ESPN having an indication for

computing the 3-digit value from the MCC and the IMSI_11_12 (paragraph [0060].

Regarding **claim 18** in addition to features recited in base claim 16 (see

rationales discussed above), Cooper also discloses wherein the first value comprises

the most significant digits of the MNC (IMSI_11_12) (paragraph [0060]).

Regarding **claim 19** in addition to features recited in base claim 17 (see

rationales discussed above), Cooper also discloses wherein the third value comprises

at least the least significant of the MNC (*paragraphs 90037]-[0038] and [0060]*).

Regarding **claim 20** in addition to features recited in base claim 1 (see rationales

discussed above), Cooper also discloses comparing the determined MNC value with the

stored MNC value to determine a roaming status [0059].

Regarding **claim 27** in addition to features recited in base claim 1 (see rationales

discussed above), Cooper also discloses the IMSI comprising MCC, MNC and

IMSI_12_11 and IMSI_S and when the MNC is 2-digits, the MNC is obtained from

IMSI_12_11 and when the MNC is 3-digits, the MNC is obtained from MCC and

IMSI_12_11 (*paragraphs 90037]-[0038] and [0060]*).

Regarding **claim 28**, the claim calls for a reverse process of method claim 1 and

it is rejected as following. In accordance to the description discussed above (see

rationales discussed in claim 1), Cooper discloses the process of forming system

parameters message (SPM) and/or extended system parameters message (ESPM) for

transmitting the network operator identifier (MNC) by the base station to the mobile on

the paging channel (*Fig. 3, paragraphs [[0032]-[0038] or Fig. 5, paragraphs [0053]-*

[0054]). At paragraph [0054], Cooper also discloses the mobile station receives SPM

and/or EPSM containing the MCC and IMSI_11_12 as described in claim 1. Thus, the

reverse process of claim 28 is inherent disclosed by Cooper for the aforementioned

rationales.

Regarding **claim 29**, in addition to features recited in base claim 28 (see

rationales discussed above), Cooper also discloses wherein the calculating comprises

converting most significant digits of MNC from decimal to binary (*paragraphs [0035]-*

[0037] and thereinafter or Fig. 3).

Regarding **claim 30**, in addition to features recited in base claim 7 (see

rationales discussed above), Cooper also discloses wherein the third field is an

IMSI_11_12 (*paragraphs 90037]-[0038] and [0060]*).

Response to Arguments

5. Applicant's arguments filed 07/16/08 have been fully considered but they are not

persuasive.

In the Remarks of the outstanding response, begins on page 6, the Applicants start out with the assertion of "*there is no evidence throughout Cooper for construing the MCC as an identifier for identifying the length of the MNC.*" To support such assertion, the Applicants continue the assertion with "*in the Office Action, the Examiner ... MNC are transmitted.*" Then, the Applicants argue "independent claim 1 recites that "the first field of the message indicates whether the MNC has the first length or the second length". And, as stated above, neither MCC nor NOC of Cooper, which are exemplary fields of the message, indicate that the MNC (or NOC) has a first length or a second length, as claimed."

In response Examiner respectfully disagrees. Applicants are noted that group claims 1-15, 27 and 30 are drawn to an unpatent-eligible process under § 101. Such rejection is issued due to the Office's understanding of the recent Bilski court case. Applicants are also reminded that it is well settled that, during examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification. *In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000).* USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023,1027-28 (Fed. Cir. 1997).* The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed. Let's revisit claim 1. Claim 1 recites a method comprising: "*transmitting a message comprising at least one of a first field and*

a second field, wherein the MNC has a first length or a second length such that the first

length is greater than the second length, and wherein the first field indicates whether of

the MNC has a length equal to the first length or the second." The specification, in

reference to Figs. 6a-6c and paragraphs [0066]-[0069], describes structures of

messages to include extended system parameter message, ANSI-41 system parameter

message and MC-RR parameter message having various fields in details. On the other

hand, claim 1 just broadly refers to such description. It is well settled that Cooper's

NOC is corresponding to the claimed MNC because at paragraph [0032] Cooper says

so. Given broadest reasonable interpretation, the claimed fields in claim 1 refer to fields

in the extended system parameter message. Cooper, at paragraph [0035], clearly

describes the extended system parameter message having the above field in details. At

paragraph [0037], Cooper further describes verbatim that "If the NOC is defined as a 2-

digit code, then the 2-digit NOC value for the network operator identifier can be carried

in the IMSI_11_12 field in a straightforward manner. If the NOC is defined as a 3-digit

code, the two digit of the 3-digit NOC value for the network operator identifier are

carried in the IMSI_11_12 field." Therefore, one could undeniably conclude that

Cooper, as clearly pointed out in the Office Action, does indeed teach the field in the

message indicates that the MNC has a first length or a second length as argued by the

Applicants.

On page 8 of the outstanding response, Applicants also argue that a combination

or modification of the Cooper's teaching by the Examiner would not be possible

because of the impermissible hindsight reconstruction given the benefit of Applicant's

disclosure.

Such argument has been noted, but not persuasive. Therefore, the Examiner

respectfully disagrees. Should there is a need for a combination or modification of the

Cooper's teaching to render the Applicants' claimed invention obvious, the Examiner's

response would be in response to applicant's argument that the examiner's conclusion

of obviousness is based upon improper hindsight reasoning, it must be recognized that

any judgment on obviousness is in a sense necessarily a reconstruction based upon

hindsight reasoning. But so long as it takes into account only knowledge which was

within the level of ordinary skill at the time the claimed invention was made, and does

not include knowledge gleaned only from the applicant's disclosure, such a

reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA

1971).

Examiner believes an earnest attempt has been made in addressing all of the

Applicants' arguments. Due to the response fails to place the instant application in a

favorable condition for allowance, the rejection is still applied.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Frank Duong whose telephone number is 571-272-

3164. The examiner can normally be reached on 7:00AM-3:30PM, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Huy D. Vu can be reached on 571-272-3155. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frank Duong/
Primary Examiner, Art Unit 2416
November 19